FACILITIES MAINTENANCE & OPERATIONS DEPARTMENT



MAINTENANCE PROCEDURES MANUAL

We're Maintenance - We Can Handle It

INTRODUCTION

GENERAL MAINTENANCE METHODS

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COMPUTERIZED
MAINTENANCE MANAGEMENT
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FACILITIES MAINTENANCE & OPERATIONS DEPARTMENT



MAINTENANCE PROCEDURES MANUAL

INTRODUCTION

SECTION I

CARROLL COUNTY PUBLIC SCHOOLS FACILITIES MAINTENANCE & OERATIONS DEPARTMENT MAINTENANCE PROCEDURES MANUAL

INTRODUCTION:

The Facilities Maintenance & Operations Department is dedicated to providing and maintaining a safe, orderly and respectful learning environment which will contribute to student and staff achievements.

It should be noted that there are some maintenance areas in which contracted services supplement and/or have major responsibilities for building and/or equipment maintenance. In those cases where contracted services have traditionally been utilized, such services have proven to be cost effective. However, the focus of the Facilities Maintenance & Operations Department will remain as follows:

- Focus on school environmental issues in keeping with a safe learning/teaching environment.
- To ensure proper training for school personnel on the Computerized Maintenance Management System (CMMS) to provide timely and efficient maintenance for all Carroll County Public Schools buildings and grounds.
- To provide the means to save energy and improve the operating efficiency of all school facilities and to ensure proper air quality controls county wide.

The overall objective of the Facilities Maintenance & Operations Department is to maintain, throughout its expected useful life, the interior and exterior of school buildings, the grounds, and the roadways, and all fixed and moveable equipment through preventive maintenance and repairs. Further, this objective is specifically intended to provide:

- 1. Buildings and their components that function safely and at top efficiency.
- 2. Facilities and equipment that minimize the possibility of fires, accidents, and safety hazards.
- 3. Continuous use of facilities without disruptions to the educational program.

- 4. Protection of public property through proper planning, scheduling, and preventive maintenance.
- 5. Quality management of maintenance projects and tasks.
- 6. Conservation of energy through utilization of the latest technology and energy conservation measures.
- 7. A quality maintenance program through effective management and efficient utilization of resources.

LEVELS OF MAINTENANCE AND RELATED COST FACTORS

There are a variety of factors associated with the desired level of school building maintenance that relate directly to the availability of resources. These include age of facility, age of equipment, available manpower, current level of funding, and facility use beyond that of the regular school day. In order to assess the impact of required school building maintenance efforts, the following factors are presented:

1. BUILDING USE

School buildings may require various levels of maintenance due to the varied use of the facilities. The maintenance effort and cost for school facilities can often be traced to the extent of the facilities use, the type of facilities use, an effective building supervisor, and community user respect. This is essentially true of the school buildings in Carroll County that have extensive community-use patterns. Respect and care by the building users usually results in fewer dollars required for maintenance.

Vandalism during occupied and unoccupied hours also places an additional cost burden on the school maintenance program.

2. BUILDING AND EQUIPMENT DESIGN

Another major factor that influences equipment and building maintenance is the design of the school facility. Facility designers have the opportunity to conserve public funds by incorporating design characteristics consistent with maintenance efficiency and longevity.

During the design process, materials and equipment selected should demonstrate characteristics of:

- Design simplicity and equipment accessibility as related to performing repairs and preventive maintenance.
- Quality and maintainability.
- Ease of component replacement and repair parts availability.
- Maximum operating efficiency of all mechanical components and maximum energy efficiency of all mechanical/electrical systems.

3. BUILDING CODES

Various federal, state and county codes (Building, Safety, Fire, Health, MOSH, ADA and indoor air quality) change from time to time. These standards must be adhered to in order to insure a safe, accessible and healthy building environment for students, employees and the public. Maintaining compliance with these code modifications is certainly a cost factor that must be considered in addition to building maintenance.

4. ADVANCES IN TECHNOLOGY

New technology and energy saving measures related to building equipment and components need to be carefully considered and incorporated into the building maintenance program in order to insure a more cost effective level of maintenance. These new technological advances may require the development of revised maintenance and operations procedures and may reduce operating costs. While such advances may show a first time or one time increase in the facilities maintenance or construction budget, there may be a significant long-term decrease in the facilities operations budget.

5. CONDITION OF EXISTING SCHOOL BUILDINGS

The condition of existing school facilities needs to be considered as well as frequency of use of facilities beyond the normal school day when evaluating the overall maintenance effort. These factors create a significant impact to the facilities maintenance program to provide adequate funding, staffing and effective building maintenance.

6. SERVICE STANDARDS

Maintenance service standards for school facilities are best established through adequate program administration and supervision, effective employee selection and training, and maintaining employee performance within the organization. The overall scope necessary for adequate facilities maintenance procedures and services is highlighted in the charts shown in Section II and Section III. These are intended to reflect scheduled service standards and routine preventive maintenance procedures.

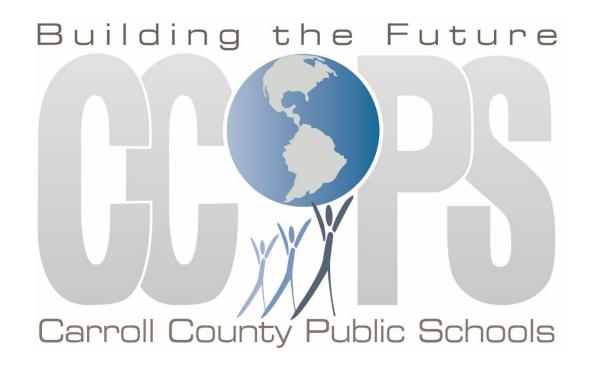
7. OPERTIONAL CONSIDERATIONS (PREVENTIVE MAINTENANCE)

The facilities operations component in the individual school (often referred to as Building Custodial Services) is an important consideration in assessing overall maintenance levels and determining costs associated with building maintenance. An effective building operations function should complement and interface with the centralized facilities maintenance function to provide an overall effective facilities maintenance program. Carroll County Public Schools has developed and implemented such a plan. We feel this combined effort is providing an effective facilities maintenance program.

The Facilities Maintenance & Operations Department has the prime responsibility for building/equipment maintenance based on specific areas of responsibilities. It should be noted that there are some maintenance areas in which contracted services supplement or have major responsibilities for building and/or equipment maintenance. In those cases where contracted services have traditionally been utilized, such services have proven to be cost effective.

In summary, all of the aforementioned factors have a direct impact on establishing a cost-effective facilities maintenance program that meets the requirements of today's educational environment.

FACILITIES MAINTENANCE & OPERATIONS DEPARTMENT



MAINTENANCE PROCEDURES MANUAL

GENERAL MAINTENANCE METHODS

SECTION II

GENERAL MAINTENANCE METHODS

There are four (4) methods for performing required building and equipment maintenance that have proven to be cost-effective and are presently being utilized in the Carroll County School System.

They include:

- Utilization of a centralized maintenance workforce.
- Effective use of facilities operations forces to perform preventive maintenance.
- Assignment of full time maintenance personnel at the high school level to perform daily maintenance tasks.
- Utilization of service contracts as needed.

The full-time centralized maintenance workforce provides the following services:

- Emergency response to power failures, plumbing, heating, and air conditioning failures
- Monitoring energy management with state of the art computerized system
- Interior and exterior painting
- Carpentry, electrical, plumbing, HVAC service and minor roof repairs
- Grounds maintenance, mowing, snow removal, landscaping, etc.
- Minor building modifications
- Vandalism repairs
- Maintenance and repair to AV equipment
- Preventive maintenance
- Maintenance and repairs to fire and security systems
- Hardware maintenance and repairs
- Utilize an electronic computerized maintenance management system

The Facilities Maintenance & Operations Department also is responsible for contracted services in which contracted services supplement or have major responsibilities for building and/or equipment maintenance. These would include:

- HVAC chiller service
- Kitchen fire hoods, service and inspection
- Elevator maintenance and inspection
- Energy management service

- Sprinkler systems maintenance and inspection
- Underground storage tank testing
- Fire extinguisher inspection and service
- Fire and security monitoring
- Bleacher, grandstands and folding wall mount inspection
- Boiler inspection

ANNUALLY SCHEDULED MAINTENANCE TASK INCLUDE:

CARPENTRY

Ceramic Tile
Ceiling Tile
Glass
Hardware
Lockers
Minor Renovations
Fire Proofing

ELECTRICAL

Ballasts
Fans
Lamps
Motors
Outlets
Switches
Outdoor Lighting
Emergency Generators
Classroom Upgrades

FLOOR

Carpet
Gym – Hardwood
Terra Cotta
Terrazzo
Floor Tile

GROUNDS

Re-Paving
Field Rejuvenation
Outdoor Stadium, Painting
Shrubs & Trees
Seeding/Fertilizer

HVAC

Air Compressors
Air Handlers
Boiler Tubes
Burners
Cooling Towers
Rooftop Units
Thermostats
Unit Ventilators

Chillers

Energy Management System

PLUMBING

Drains Fixtures Pumps Strainers Faucets

Piping & Insulation

SECURITY

Burglar Alarms
Emergency Lighting
Fire Alarms
Generators
Public Address System
Security Cameras
Magnetic Card Readers

FIRE PROTECTION

Sprinkler Test & Inspection Fire Extinguisher Test & Inspection Kitchen Hood Test & Inspection Fire Pump Test & Inspection

Athletic Field Maintenance

REFRIGERATION

Inspect, Clean & Service Equipment Replacement

MASONRY

Brick Block Concrete

INSPECTIONS

Elevators & Chairlifts
Fire Protection Systems
Health Department
Boiler & Pressure Vessel
Indoor Air Quality

FACILITIES MAINTENANCE & OPERATIONS DEPARTMENT



MAINTENANCE PROCEDURES MANUAL

BUILDING MAINTENANCE AND REPAIRS

SECTION III

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Audio Visual Equipment Repair

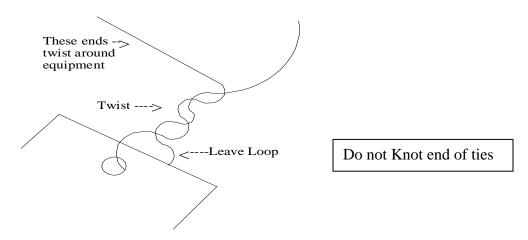
General

Equipment needing repair may be sent for repair throughout the year. Audiovisual equipment should be tagged and left in the designated area for PONY pick-up. The PONY will deliver the equipment to the Facilities Maintenance Department who will repair it.

Tagging

A Work Order Request should be submitted using the Computerized Maintenance Management System (CMMS). You can access the CMMS through the Technology Services Portal, using the My School Building application. When a request is saved it gives a *Work Order Number*. This number is recorded on a **A.V. Equipment Shipping Request** form (**see Attachment**) in the "Work Order #" box. The rest of the form should then be filled out including, Type of equipment, model, serial no., block no., originator location signature and date. The <u>top white copy is kept at the school</u>.

Attach the **A.V. Equipment Shipping Request** form with the plastic 12" ties provided, twisting the ties leaving a loop as shown below. Failure to leave a loop could cause the ties to tear the form resulting in loss of the form. (Do not use bare wire ties) Place the equipment in the area designated for equipment pick-up.



Order "A.V. Equipment Shipping Request" forms and plastic ties from Facilities Operations Department, Ext. 3470

Attachment - A.V. Equipment Shipping Request

Ship from Location:	MEDIA Ship to Location:	yord Sunsanbat as
Type of Equipment: EIM	O OVERHEAD	
Model: HP-L35		Block No.
Complete the appropriate box:		
Work	Contractual	Trans to another
Order Order	Repair*	Cost Center
Work Order # 57541	Method of Shipping	Attn:
*Contractual Repair work to be d	one by:	n sé orar insmigir
Originator Location Signature	Date 3/31/06	Driver's Initial
Receiving Location Signature	Date) motod edi eosa.
Return Location Signature	Date	Driver's Initials

Bleachers and Grandstands

Contact: Supervisor of Facilities Maintenance & Operations

751-3199

PERMANENT BLEACHERS/GRANDSTANDS

Repair of existing permanently installed bleachers and grandstands shall be the responsibility of the Facilities Maintenance Department. Requests for repairs should be submitted using the Computerized Maintenance Management System (CMMS). You can access the CMMS through the Technology Services Portal, My School Building application.

Facilities Maintenance & Operations will oversee the inspection of bleachers on an annual basis. Major repair and replacement of stadium grandstands should be submitted by the principal as a capital project.

<u>Bleachers – Retractable Indoor</u>

Contact: Supervisor of Facilities Maintenance & Operations

751-3199

Proper operation and preventive maintenance of indoor bleachers is critical in order to insure continued safety. Only properly trained personnel may operate bleachers in order to prevent misalignment due to improper extension and retraction.

Bleacher Operating Guidelines are provided to each school and should be strictly followed. The Supervisor of Facilities Maintenance & Operations upon request will provide training for bleacher operation.

Routine preventive maintenance on bleachers is critical. A visual inspection of bleachers is required each time the bleachers are fully extended as required in the operating guidelines. Minor repairs such as loose bolts and boards and lubrication should be done locally by the in-house maintenance personnel. Misalignment, drive chain problems, broken or cracked welds and other serious problems should be immediately brought to the attention of the Supervisor of Facilities Maintenance for repairs. A bleacher repair crew will be assigned or repairs will be contracted.

Bleachers will be inspected twice annually by a bleacher repair vendor or by the Supervisor of Facilities Maintenance & Operations.

Whenever, in the opinion of the Supervisor of Facilities Maintenance & Operations, bleachers are unsafe, they will be taken out of service until repairs can be made.

Boiler Inspections

Contact: Supervisor of Facilities Maintenance & Operations

751-3199

All boilers are opened, cleaned and inspected annually by the Facilities Maintenance Department. This task is scheduled in conjunction with the inspections performed by our insurance carrier representative acting in the legal capacity of State Boiler Inspector.

Repairs on boilers will be scheduled and accomplished after all boilers in each facility have been inspected, internal and/or external. Emergency repairs are performed as required.

All boilers to be taking out of commission are to be preauthorized by the Supervisor of Facilities Maintenance & Operations. All other boilers are to be kept in efficient operating condition at all times.

Boiler and/or mechanical rooms are to be kept clean and uncluttered, free of debris, surplus materials or stored equipment.

BOILER INSPECTIONS

Boiler inspections are required by the State of Maryland prior to the expiration date on the inspection certificate. A representative from our contracted insurance company inspects the boiler or pressure vessel and submits the results to the State of Maryland, Department of Labor, Licensing and Regulation. An updated certificate (see sample) is then issued to the Board of Education. When the new certificate is received in the Facilities Maintenance Department, the following steps are taking:

- Information is entered in Excel spreadsheet, file name
 S:\spreadfil\boiler inspection.xls
- 2. Update the information as follows:
 - a. Locate school.
 - b. Verify Maryland Registration Number.
 - c. Update issue date and expiration date.
- 3. If the boiler or pressure vessel is newly installed or replaced, the following information needs to be entered in the database:
 - a. School
 - b. Expiration date
 - c. Location in the building
 - d. Issue date
 - e. Maryland registration number
 - f. Type of boiler or pressure vessel
- 4. Make copies of certificates
- 5. Send original certificate to appropriate school to the attention of the building supervisor to be displayed in the designated manner (a picture frame located by the boiler or pressure vessel).
- 6. File copies in "Boiler Inspections" binder (located in secretary's office)
- 7. Submit a copy of the Boiler Report Form to the Supervisor of Facilities Maintenance & Operations for review.

Building/Grounds Repairs

Requests for repairs should be submitted using the Computerized Maintenance Management System (CMMS). You can access the CMMS through the Technology Services Portal, using the My School Building application. Upon receipt of the request, the Supervisor of Facilities Maintenance & Operations, Deputy Supervisor of Facilities Maintenance & Operations, or the Dispatcher will review and prioritize the request according to the quidelines set forth below:

Emergency:

Items considered as critical to building security or detrimental to the health and safety of the students and staff will be acknowledged within *24 hours* (a follow-up telephone call is necessary for all emergency requests).

High:

Health and safety items will receive a High priority. Items in this category are targeted to be completed within 10 days.

Medium:

These requests are not considered critical but are important to the operation of the school. Items in this category are targeted to be completed *within 30 days*.

Low:

If time and budget allows, these items will be completed within 90 days.

Carpeting - Replacement/Additions

Contact: Supervisor of Facilities Maintenance & Operations

751-3199

<u>REPLACEMENT</u>

Maintenance and replacement of carpeting is the responsibility of the Supervisor of Facilities Maintenance & Operations. Principals shall advise the Supervisor of Facilities Maintenance & Operations of areas of carpeting in need of replacement so that the appropriate budget request can be made.

Damaged/frayed carpet repair requests should be submitted using the Computerized Maintenance Management System (CMMS). You can access the CMMS through the Technology Services Portal, using the My School Building application.

<u>ADDITIONAL</u>

All additional carpet shall be requested through and purchased by the Supervisor of Facilities Maintenance & Operations. Principals desiring to purchase carpeting through alternative funding may do so, however, this work should be coordinated through the Purchasing and Facilities Maintenance Departments.

All carpet, regardless of funding source for the purchase, must conform to all local building and life safety codes. Included in the requirement of meeting all building and life safety codes are all types of rugs, whether room size or scatter rugs, regardless of ownership.

Curtains/Shades Maintenance & Replacement

Contact: Supervisor of Facilities Maintenance & Operations

751-3199

STAGE CURTAINS

Replacement of stage curtains should be requested through the Supervisor of Facilities Maintenance & Operations. Curtains will be replaced as the budget allows. Maintenance of stage curtain mechanical parts (tracks, pulleys, cords, etc.) shall be performed upon receipt of a Maintenance Request using the Computerized Maintenance Management System (CMMS). You can access the CMMS through the Technology Services Portal, using the My School Building application.

OFFICE/LIBRARY/STAGE CURTAINS

Office curtains may be budgeted for replacement through the Facilities Maintenance budget but generally receives a low priority. For this reason, replacement should occur through local school accounts or contributions.

Limited funds are available through the Facilities Operations budget for the cleaning of office, library and stage curtains. Generally, the cost of cleaning is handled through local school accounts.

CLASSROOM CURTAINS, DRAPERIES, SHADES AND VENETIAN BLINDS

The procurement and replacement of general classroom window coverings is handled by the Facilities Maintenance Department through the operating budget. Requests should be made annually through the Supervisor of Facilities Maintenance & Operations.

The building supervisor or in-house maintenance staff in the case of the high school may handle repair of general classroom window coverings.

Elevators & Wheelchair Lifts

Contact: Supervisor of Facilities Maintenance & Operations

751-3199

ELEVATORS/ WHEELCHAIR LIFTS/DUMBWAITERS

All elevators shall be inspected monthly through a contracted certified inspector. A representative of the Division of Labor and Industry performs an annual inspection. Inspections are budgeted for and coordinated by the Supervisor of Facilities Maintenance.

Requests for repairs should be submitted using the Computerized Maintenance Management System (CMMS). You can access the CMMS through the Technology Services Portal, using the My School Building application. After submitting the request, call and notify the Facilities Maintenance Department.

All wheelchair lifts shall be inspected annually by a contracted certified installer. Inspections and maintenance repairs are budgeted for and coordinated by the Supervisor of Facilities Maintenance & Operations.

Requests for repairs should be called in to the Facilities Maintenance Department.

ACCIDENT REPORT GUIDELINES

The Division of Labor and Industry requires reporting accidents involving the use of elevators, escalators, moving walks and dumbwaiters. (Section 3012.4 of the BOCA National Building Code/1993).

Immediately after becoming aware of an accident that results in a serious injury (requiring medical care) or fatality, the building owner or authorized representative shall notify the Division of Labor and Industry at 410-767-2236. The Supervisor of Facilities Maintenance & Operations is the authorized representative for Carroll County Public Schools. Please take the elevator out of service and contact the Facilities Maintenance Department when an accident of this nature occurs. The telephone system for the Division of Labor and Industry is in effect during evening and weekend hours to ensure that staff is available around the clock to respond appropriately to emergency situations. Therefore, accidents may be reported 24 hours a day, seven days a week.

When the serious injury or fatality occurs as a result of the operation of the elevator, escalator, moving walk or dumbwaiter, the device shall be closed until inspected by an inspector from the Safety Inspection Program for the Division of Labor and Industry.

Emergency Procedures & Contacts

Contact: Supervisor of Facilities Maintenance & Operations

751-3199

Emergency response requests during normal operating hours, should be reported to the Supervisor of Facilities Maintenance & Operations. For emergency response requests after normal operating hours, weekends or holidays, contact the on call administrator at 443-789-7546. An appropriate response action will be taken immediately.

Building Supervisors should be scheduled to report to work in ample time to report emergency response requests as early as possible. Principals should advise the appropriate director of emergency problems as soon as possible when it is anticipated that the situation warrants consideration for closing school for the day. Decisions regarding the closing of individual schools are made by the Superintendent based on the recommendations of the Director associated with that site. The Director of Facilities Management consults and advises regarding facilities emergencies and timeliness of repairs.

Decisions must be made prior to 6:30 a.m. in order for an individual school to be closed for the day. Announcements must be made earlier in order for parents to make alternative arrangements and for bus drivers to be notified of the closing.

EMERGENCY TELEPHONE NUMBERS (Cell Phone)

Director of Facilities Mgt	Ray Prokop	<u>443-375-2698</u>
Director of Elementary Schools	Cynthia McCabe	443-847-0110
Director of Middle Schools	Thomas Hill	410-227-6107
Director of High Schools	Kimberly Dolch	410-608-1405
Sup of Facilities Maint. & Ops	Michael Andrews	410-422-0077
Supervisor of Construction	James Marks	443-340-9578

Energy Conservation

Contact: Director of Facilities Management

751-3177

Supervisor of Facilities Maintenance & Operations

751-3199

The Carroll County Board of Education endorses all appropriate measures to conserve energy and energy resources (Board Policy EFC).

Energy consumption throughout the year, both during the heating and cooling seasons, is a costly item for the Board requiring careful management.

The following guidelines should be adhered to:

Heating Season

1. Thermostats in all schools shall be set to provide an ambient room temperature of <u>68°F</u> during the regular school day. This pertains to classrooms, relocatables, offices, corridors, gyms, locker rooms, multipurpose rooms and auditoriums. Re-locatable classrooms not on a timer must be manually set back. Thermostats in relocatables should be set at day setting when temperatures below 20° F are expected.

As a general rule, thermostats shall be set back to a night setting on school days between the hours of <u>4 p.m.</u> and <u>6 a.m.</u> Earlier setbacks may be instituted with the intent of allowing building temperature to coast for the last hour of student occupancy, thus conserving energy. On holidays and non-school days the night setting shall be in effect throughout day hours as well. When this procedure starts, all windows and doors will remain closed so that we are not "heating the outdoors."

Carroll County Board of Education <u>does not provide</u> heating of school facilities for third, fourth, fifth or sixth priority users (church services, community recreational councils, for profit groups etc.) and schools should be left on the night setting during the hours established above unless otherwise approved by the Director of School Support Services and a fee established. Additional charges for use of facilities should be noted on the Use of Facilities Application.

2. In extremely cold weather (when the nighttime low is expected to drop in the teens), building supervisors should place the heating temperatures on a

- daytime setting to prevent freezing of pipes. If there is any doubt as to when to do this, the Office of Facilities Maintenance or the Director of Facilities Management should be consulted.
- 3. On warm temperate days, the hot water heating system will reset to the lowest set point or cycle down to a pre-determined lowest set point. This need or demand will be regulated through the Energy Management System.

Cooling Season

4. Thermostats in all schools shall be set to provide ambient room temperature of **74°F** during days when schools are in session for students and instructional staff. This pertains to classrooms, relocatables, offices, corridors, gyms, locker rooms and auditoriums. Air conditioning shall be controlled in the same manner as heat with nighttime settings being regulated via the energy management system. Schools on energy management systems must pre-program the scheduled occupancy in advance in order to provide appropriate cooling for the required period of occupancy.

It is the responsibility of the building supervisor in conjunction with the school principal to pre-arrange and coordinate that the schedule is properly programmed into the energy management system.

The Carroll County Board Of Education does not provide air conditioning for third through sixth priority users of facilities unless payment for such is made by the user agency. This only occurs in special circumstances. Notation must be made on the Application for Use of Facilities in the Building Changes section so that an invoice can be generated.

Summer Season

5. Zoned air conditioning for the office area is permitted throughout the summer months. Other zones throughout the building may be cooled only when Board of Education summer school or Board of Education in-service classes are in attendance or when carpet shampooing is occurring in a particular area. An ambient temperature of 74°F shall be maintained.

Air conditioning should be operated to provide cooling in the zones where carpet shampooing is occurring and not the entire building. Cooling should remain on in the area being shampooed until carpet is completely dry to prevent mold and mildew.

6. During warm temperature months when relative humidity level in a school Building is above 55 % de-humidification is enabled through the Energy Management System where applicable.

Fire Alarm System & Security Monitoring

Contact: Supervisor of Facilities Maintenance & Operations

751-3199

A security systems vendor centrally monitors all fire alarm and security systems. When an after-hours breach of security occurs or whenever a fire alarm pull station, smoke sensor or sprinkler head is activated, the monitoring company will contact the appropriate emergency response personnel. In the case of fire, 911 will be contacted and in the case of a security alarm the appropriate law enforcement agency (city or state) will be notified. In addition the monitoring company maintains a list of three (3) school contacts. These contacts are listed in priority order for notification.

In the event of an alarm (fire or security) after hours, the designated school system employee will be expected to respond to the scene to investigate and reset fire or security devices. In the case of a security alarm, it is recommended that the responding individual not enter the building without police assistance.

Fire Drills

Before conducting a fire drill where a pull station is activated, the cost center administrator must first contact the monitoring company to notify them of the test. An authorization code must be declared at the time of the call. The Supervisor of Facilities Maintenance & Operations will advise each school of their code. The fire system alarm can then be activated.

Upon completion, a follow up call is required to put the system back in service. The vendor will confirm that the test alarm was received and the system restored.

Security Code

Each cost center equipped with a security system will have an access code required to activate and de-activate the system. This code should be kept confidential and only made known to the specific individuals allowed access (i.e., principal, assistant principal, building supervisor). This security code should be changed periodically by submitting a work request through the Computerized Maintenance Management System (CMMS). You can access the CMMS through the Technology Services Portal, using the My School Building application.

Each cost center equipped with a security system must activate the system whenever the building is unoccupied.

Fire Alarms, Clocks, Bells and Sound Systems

Contact: Supervisor of Facilities Maintenance & Operations

751-3199

Repair and replacement of fire alarms, clocks, bells and sound systems are the responsibility of the Supervisor of Facilities Maintenance & Operations. The audiovisual repair technicians perform service and repairs on clocks, bells and sound systems and the system controls technician generally services fire alarm systems. Repairs may be requested by submitting a Maintenance Request on the Computerized Maintenance Management System (CMMS). You can access the CMMS through the Technology Services Portal, using the My School Building application.

Emergency repairs shall be requested by telephone. A malfunctioning fire alarm system, paging or "all-call" system of the sound intercom console are examples of emergency repairs. An emergency response will be made within twenty-four (24) hours of request.

Fire Marshal Inspections

Contact: Supervisor of Facilities Maintenance & Operations

751-3199

The Office of the State Fire Marshal has the right to inspect the buildings of Carroll County Public Schools at their discretion. Inspections generally occur annually, without any warning. The building supervisor or a designated person must accompany the Fire Marshal during building inspections. If possible, the principal should attend.

When the Fire Marshal inspects a facility he/she completes an Inspection Report Form, a copy of which is presented to the building principal. A copy of the inspection results is also forwarded to the Supervisor of Facilities Maintenance & Operations. It is the local school administrator's responsibility to review the report and expedite any necessary housekeeping chores that are mentioned in the report. A Maintenance Request through the Computerized Maintenance Management System (CMMS) should be submitted by the Supervisor of Facilities Maintenance & Operations or designated person for those items needing repair beyond the means of the local building staff.

Corrective action will be scheduled unless requiring budgetary action. Expensive items will be budgeted in the next FY operating budget.

If corrective action is not taken within a reasonable amount of time, the school administration should alert the Supervisor of Facilities Maintenance & Operations that the violation still exists.

The Office of the Fire Marshal provides a summary report to the Director of Facilities Management. The Director of School Support Services through the Facilities Maintenance & Operations Department will do follow-up on completion of inspection items.

Glass Repair/Replacement

Contact: Supervisor of Facilities Maintenance & Operations

751-3199

When window breakage occurs, the building supervisor or custodian should evaluate immediately the security/safety or potential for further damage to determine whether repairs must be completed immediately or can wait until the next day. If repairs can wait, the custodians should weather-seal the window with cardboard or other material and then submit a repair request through the Computerized Maintenance Management System (CMMS). You can access the CMMS through the Technology Services Portal, using the My School Building application. Emergency requests submitted should be followed up with a telephone call to the Facilities Maintenance & Operations Department.

On weekends, holidays or at any time when the office of Facilities Maintenance & Operations is closed, emergency repair needs should be reported to the On-Call Administrator 443-789-7546.

Cracked, stained or chipped windows where building security or safety is not an issue, a repair request should be made through the Computerized Maintenance Management System (CMMS). You can access the CMMS through the Technology Services Portal, using the My School Building application. Repairs will be completed as soon as possible and as allowed by the budget.

Graffiti

Contact: Supervisor of Facilities Maintenance & Operations

751-3199

All graffiti shall be removed as quickly as possible.

Graffiti on the interior of the building should be removed by custodial personnel whenever possible through use of cleaning materials or touch-up paint. Extensive property defacing should be brought to the attention of the Supervisor of Facilities Maintenance & Operations for assistance.

Graffiti on the exterior of the building, tennis courts, multi-use courts, blacktops, tracks, etc., should be brought to the attention of the Supervisor of Facilities Maintenance & Operations for removal.

You may submit requests for assistance with the removal of graffiti via the Computerized Maintenance Management System (CMMS). You can access the CMMS through the Technology Services Portal, using the My School Building application.

Grounds Keeping Schedule Athletic Fields

Contact: Supervisor of Facilities Maintenance & Operations

751-3199

Seasonal mowing is provided by the Facilities Maintenance Department on a regularly scheduled basis throughout the mowing season at middle schools and elementary schools. High schools assign a custodial grounds keeper to perform the task of regularly scheduled grounds keeping.

Athletic field maintenance, including fertilizer and aeration, is budgeted in the Facilities Operations Department on an annual as needed basis through the Integrated Pest Management (IPM) program

Major alterations to building grounds and athletic fields should be requested in the local capital budget or through the Carroll County Department of Recreation and Parks whenever community use is part of the justification for the request.

Health Department Inspections

Contact: Supervisor of Facilities Maintenance & Operations

751-3199

Supervisor of Food Services

751-3041

The Carroll County Health Department has the authority to conduct periodic inspections of Carroll County Public School facilities. Generally, two inspections are conducted annually, one in the fall and one in the spring. One inspection is a general inspection covering the food preparation and serving areas, restrooms, classrooms, playground, etc. A second inspection specifically focuses on food service areas. Concession stands are inspected along with the school's regular food service area(s).

The inspector completes a standard form and leaves it with the cafeteria manager and principal. These individuals should correct general housekeeping items or minor repairs, etc. within the capabilities of in-house staff. Items not correctable at the local school level should be forwarded to the Supervisor of Facilities Maintenance for action.

It is the responsibility of the building administrator to notify the Facilities Maintenance Department if corrective action is not taken within a reasonable time span.

A summary report of all school inspections is forwarded to the Director of Facilities Management at the end of each inspection period or at least annually. The Director of Facilities Management then returns a report of corrective action to the Health Department.

Kitchen/Cafeteria

Contact: Supervisor of Facilities Maintenance & Operations

751-3199

Supervisor of Food Services

751-3041

The Supervisor of Facilities Maintenance & Operations is responsible for all repairs and maintenance of building and building systems in the cafeteria and kitchen areas. Requests for repairs should be submitted using the Computerized Maintenance Management System (CMMS). You can access the CMMS through the Technology Services Portal, My School Building application. Requests for building improvements should follow normal budgetary procedures.

The Food Services Department is responsible for repair/maintenance of kitchen equipment. This includes the purchase of new or replacement dishwashers reachin freezers, ovens and other large equipment as well as small items.

Major kitchen expenditures such as walk-in freezers may be requested in the capital budget through the Supervisor of Food Services.

Building supervisors are responsible for scheduling the daily cleaning of the kitchen and cafeteria as well as a thorough cleaning during the summer months.

Custodial staff is responsible for trash removal during lunch periods and shall assist with cleaning of spills, etc. Custodial staff shall not be responsible for the sale of food items unless requested to do so in an emergency.

Lighting-Emergency/Security/Stadium

Contact: Supervisor of Facilities Maintenance & Operations

751-3199

EMERGENCY LIGHTING

Many schools are equipped with emergency generators which power access lighting in the event of a power failure. Routine preventive maintenance requires the generators to be run and checked weekly by the building supervisor.

Schools not equipped with generators are equipped with battery operated emergency access lighting. These power pack units should also be checked in accordance with the preventive maintenance program.

SECURITY LIGHTING

The custodial staff as part of regular preventive maintenance should routinely check all parking and exterior building lighting. All parking lot lighting is either on timers or photocells. The building supervisor should check time clocks frequently for correct time.

Requests for repairs to security lights should be submitted using the Computerized Maintenance Management System (CMMS). You can access the CMMS through the Technology Services Portal, My School Building application.

Requests for additional security lighting should be submitted using the Computerized Maintenance Management System (CMMS). You can access the CMMS through the Technology Services Portal, My School Building application. Installation of additional security lighting will be done as allowed by the budget and priority of need.

STADIUM LIGHTING

As with security lighting, lights for stadiums should be routinely checked by the building supervisor, athletic director or designee of the principal. Routine or emergency bulb replacement and light repairs should be submitted using the Computerized Maintenance Management System (CMMS). You can access the CMMS through the Technology Services Portal, My School Building application. Bulb replacement is generally contracted and electric service/breaker repair and replacement is done in-house. If possible, summer is the best time to contract for bulb replacement. As a rule, multiple bulbs in a stadium or on an individual pole must be ordered before replacement is contracted.

Line Marking - Parking Lots, Hardtop Play Areas

Contact: Supervisor of Facilities Maintenance & Operations

751-3199

Supervisor of Construction

751-3032

Parking lot lining shall be completed during the summer months as requested by the principal. Requests for repairs should be submitted using the Computerized Maintenance Management System (CMMS). You can access the CMMS through the Technology Services Portal, My School Building application. Special provision for handicapped parking and fire lane designation shall be coordinated through the Supervisor of Construction in cooperation with the Supervisor of Facilities Maintenance & Operations. Construction Assistants are specialists in these areas and provide guidance.

Relining of hardtop play areas shall also be accomplished during the summer months as stated above. Changes in lining shall be requested by including a detailed diagram attached to the Maintenance Requisition.

Painting - Interior and Exterior

Contact: Supervisor of Facilities Maintenance & Operations

751-3199

<u>INTERIOR</u>

Subject to the budgeted funds, and depending on the overall plant condition, interiors of buildings are painted on a ten- year cycle. Interior painting is generally handled by the Facilities Maintenance paint crew and is usually scheduled during second shift to reduce interference with classroom activity and to minimize the effect of fumes on building inhabitants.

Some interior painting, such as gym ceilings, is contracted and must be budgeted for specifically.

A standardized color board for color selection is available through the Facilities Maintenance Department. These interior and exterior colors are approved and accepted by the school system.

EXTERIOR

Building exteriors are generally painted on a ten-year cycle with additional consideration given based on actual building condition and subject to the availability of funds.

Playground/Gym Equipment

Contact: Director of Facilities Management

751-3177

Supervisor of Facilities Maintenance & Operations

751-3199

Coordinator of Environmental Safety

751-3470

Playground equipment should be inspected bi-annually by the building supervisor as required in the Preventive Maintenance Program. Inspections are critical in that faulty equipment is a significant liability. The risk of injury to students and other community users is greatly reduced when playground equipment is well maintained. Physical education instructors should also be involved in periodic inspections of outside equipment and specifically involved in the inspection of inside gym equipment prior to and during use.

Requests for repairs should be submitted to the Supervisor of Facilities Maintenance & Operations through the Computerized Maintenance Management System (CMMS). You can access the CMMS through the Technology Services Portal, My School Building application. Replacement chains, seats, boards, etc. are stocked and repairs can be made as needed.

Bedding material or mulch is critical in playground equipment areas. Injuries due to falls from equipment are greatly reduced when sufficient bedding material is maintained. Mulch requests may be submitted to the Supervisor of Facilities Maintenance & Operations through the Computerized Maintenance Management System (CMMS) and coordinated through Facilities Operations Department and the Integrated Pest Management program.

<u>Painting</u> - Routine painting of playground equipment should be done by local custodial staff or the building supervisor if possible. If not possible, the Facilities Maintenance Department will schedule the painting on an as needed basis.

<u>Tot Lots</u> - The Department of Recreation and Parks has historically provided self-help funds to PTA/Recreation Council groups for the purchase and installation of Tot Lots. Application may be made bi-annually to the Department of Recreation and Parks for such projects. The Director of Facilities Management and the Supervisor of Facilities Maintenance must approve the application, location and provide final inspection.

Maintenance and repair of Tot Lots are the responsibility of Facilities Maintenance Department and Facilities Operations Department. The bi-annual inspection should include this equipment. Wooden structures in particular should be closely examined for deterioration. The Supervisor of Facilities Maintenance & Operations and Director of Facilities Management, in consultation with the Board of Education Insurance Safety Inspector, will determine when a Tot Lot must be taken out of service due to age and deterioration. Questions pertaining to safety of this equipment should be brought to the attention of the Director of Facilities Management who will arrange for a safety inspection.

Refrigeration Equipment - Kitchen

Contact: Supervisor of Food Services

751-3041

Supervisor of Facilities Maintenance & Operations

751-3199

The Refrigeration Technician assigned to Facilities Maintenance Department generally handles routine preventive maintenance of food services refrigeration equipment. Repair service requests may be submitted through the Computerized Maintenance Management System (CMMS). You can access the CMMS through the Technology Services Portal, My School Building application. Emergency repairs should also be followed up with a telephone call to the Facilities Maintenance Department. At times, when repairs are beyond the capabilities of Board of Education staff, service work is contracted. The Supervisor of Food Services and the Supervisor of Facilities Maintenance & Operations generally confer regarding service of this equipment.

Cafeteria managers are responsible for daily refrigeration temperature checks during their duty year. Building supervisors are responsible for holiday and summer vacation temperature checks. This is critical due to large commodity inventory on hand at these times generally of a large dollar value.

A "Food Service Refrigeration Equipment" Checklist is provided annually for use by building supervisors during the summer months.

Scoreboards - Electronic

Contact: Supervisor of Facilities Maintenance & Operations

751-3199

Maintenance of existing electronic scoreboards shall be performed by the Facilities Maintenance Department.

Purchase of replacement scoreboards shall be the responsibility of the local school and/or community group such as the PTA/PTO, athletic booster clubs, etc. Installation is usually contracted out through the Purchasing Department. Any assistance needed from the Facility Maintenance Department may be requested through the Computerized Maintenance Management System (CMMS). You can access the CMMS through the Technology Services Portal, My School Building application.

<u>Signs</u>

Contact: Supervisor of Facilities Maintenance & Operations

751-3199

Purchase of all signs, new or replacement, and repair requests for existing signs may be submitted through the Computerized Maintenance Management System (CMMS). You can access the CMMS through the Technology Services Portal, My School Building application.

Specific wording for special notice signs shall be clearly placed on the requisition (i.e., no skateboarding, no trespassing after dark, no recreational vehicles).

Wording should be limited in order to communicate a clear message.

Snow and/or Ice Removal

Contact: Supervisor of Facilities Maintenance & Operations

751-3199

Snow and ice removal from bus loops and parking areas is handled by the Facilities Maintenance Department. School personnel should ensure that parking areas and driveways are free of vehicles so that snow and/or ice removal can be accomplished.

Snow and ice removal from sidewalks is the responsibility of the school custodial crew. In cases of excessive snow, principals and building supervisors may alter custodial schedules in order to accomplish snow removal so that work is complete prior to the opening of school.

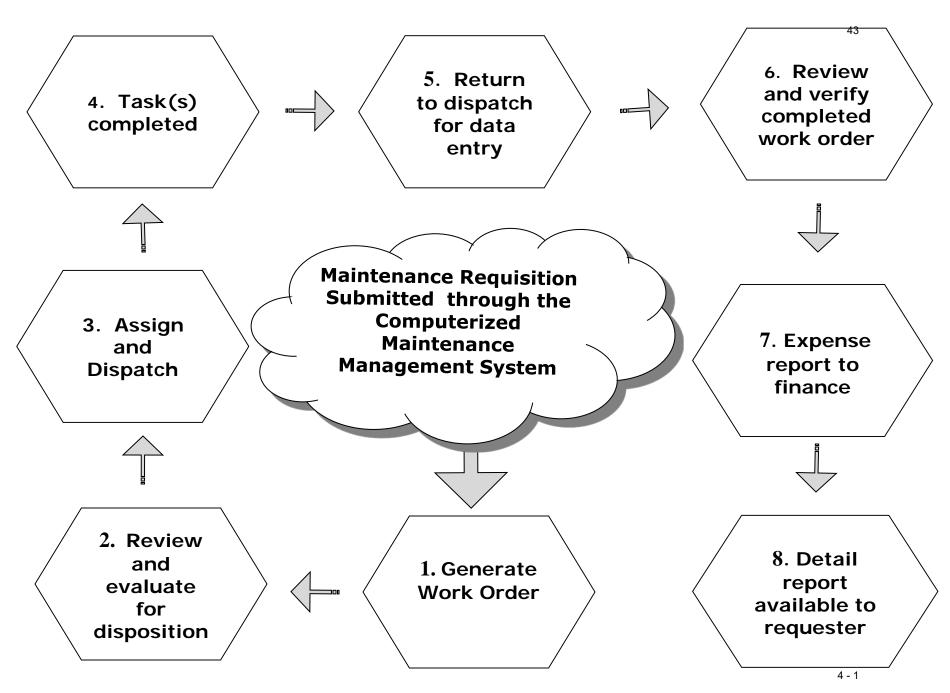
FACILITIES MAINTENANCE & OPERATIONS DEPARTMENT



MAINTENANCE PROCEDURES MANUAL

COMPUTERIZED MAINTENANCE MANAGEMENT SYSTEM

SECTION IV



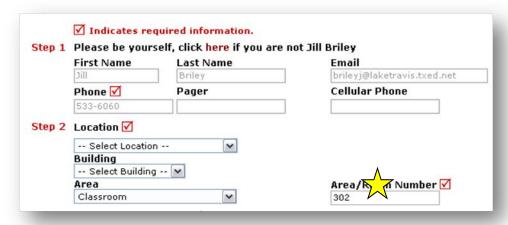
GENERATE WORK ORDER

You can access the CMMS through the Technology Services Portal, using the My School Building application.

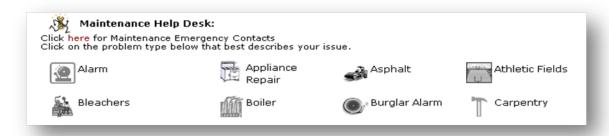
Filling out the Request Form:

NOTE: ANY FIELD MARKED WITH **I** IS A REQUIRED FIELD

- Step 1: This will be filled in with your information from the email address you entered at the sign in screen.
- Step 2: Click on the drop down arrow and highlight a *Location* that you want the work to be done and click the mouse.
 - Follow the same steps for **Building** and **Area** *if selections are available.
 - Also be sure to type in your Area description or Room #.



☑Step 3: Select the icon that best describes your problem and click on it.



✓ Step 4: Type in your description of the problem

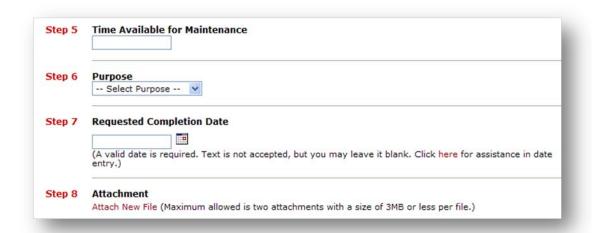
Optional steps that may appear on your page:

Next Step: Type in the best time for a technician to come by if available

Next Step: Click on the drop down arrow and select a purpose code if available

Next Step: Use calendar to select a date for when you would like the work to be completed *if available*

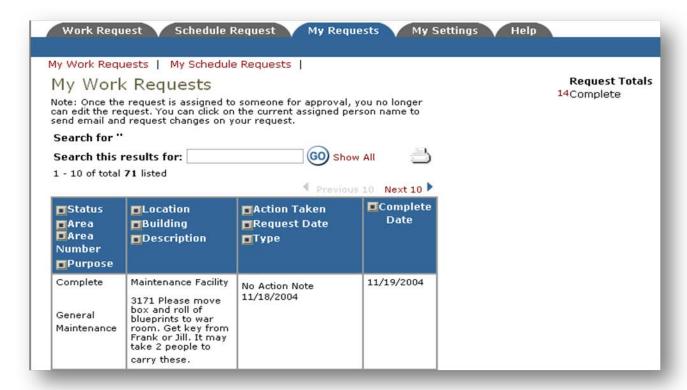
Next Step: Click the Attach New File link to attach a photo or document detailing the issue **if available**



- **☑ Next Step:** Type in the submittal password of: work order
- **✓** Last Step: Click submit

My Request Tab

After you click submit on the request form, the screen will refresh to the *My Request* Tab.



On this screen you will see up-to-date information on your request including:

- Status
- work order number for referencing
- The date you requested the work
- Any Action Taken notes added by the technician on the progress
- And a Completion Date once the work has been completed

TIPS:

- A. In the Request Totals section (on the right hand side of the above screen), you can click on the number next to the status description to see all request marked with that status.
- B. You can search for any work order request by typing in a key word in the **Search** box and clicking on **GO**. This will pull up any of your requests with that word in it. (Ex: keys would pull up any request dealing with keys).
- C. Click on the Work Request Tab to input a new request.

REVIEW AND EVALUATE FOR DISPOSITION

- A. Receive maintenance request from school
- B. Request is reviewed by Supervisors and assigned a status, Supervisors determine if work will be done in-house or contracted out, depending on the scope of the request

ASSIGN AND DISPATCH

- A. Assign a start date
- B. Assign requested completion date (if needed)
- C. Assign to a craft
- D. Dispatch to employee (trades person) to complete
- E. Request from the schools for supplies are assigned to the Shipping/Receiving Clerk for disposition

TASK COMPLETED

- A. Employee completes the actual work and completes the action taken and labor portions of the Work Order
- B. Work Order is returned to dispatcher with all invoices attached

RETURN TO DISPATCH FOR DATA ENTRY

- A. Obtain completed work orders from dispatcher
- B. Run a report from SchoolDude on actual completion date range
- C. Match work order I.D. number against report
- D. Verify purchased expenditures with invoices

- E. Run inventory issue report, obtain supervisors signature and submit to finance
- F. Work orders are filed with a copy of the SchoolDude Completion Report for future reference

FOOD SERVICE WORK ORDERS

The invoices for food service repair supplies are sent to the Food Services Supervisor for proper budget coding along with a copy of the work order to explain completed job.

CAPITAL IMPROVEMENT PROJECTS

Projects such as renovations, portable classroom start up and tasks associated with CIP that maintenance is involved in must be submitted through the work order process. Expenditures for such projects are covered by the facilities budget or grant monies (i.e. aging schools etc).

FACILITIES MAINTENANCE & OPERATIONS DEPARTMENT



MAINTENANCE PROCEDURES MANUAL

EMPLOYEE PROTOCOL

SECTION V

MAINTENANCE DEPARTMENT LEAVE PROCEDURE

Due to the daily scheduling of work for each trade as well as joint efforts of related trades people, it has become necessary to implement and enforce this leave procedure.

Effective immediately the following policy for requesting all types of scheduled leave will be in effect.

- 1. All requests for scheduled leave must be submitted using a "Request for Leave" form or submitted through the "Absence Management" application. The "Request for Leave" form or the request in the "Absence Management" application must be approved by the Supervisor of Facilities Maintenance & Operations or designated representative, before leave can be taken.
- 2. Twenty-four hours advanced notice is required for scheduled leave. The "Request for Leave" form or the "Absence Management" request will be reviewed and "Approved or Disapproved" and returned to your mailbox or email prior to the end of the same workday shift, if the request is submitted at the start of the shift. Vacation, Personal Business, Compensatory Time, and Scheduled Sick Days apply under this procedure.
- 3. If an employee needs to request scheduled leave less than the required twenty-four hours in advance, the employee must first receive approval from their direct supervisor, "Assistant Supervisor of Facilities Maintenance & Operations". Once the employee receives the approval, they can then submit the "Request for Leave" form or enter a request for leave in the "Absence Management" application. The Supervisor of Facilities Maintenance & Operations or designated representative must approve, before the employee can take the leave.
- 4. In the case of an emergency, notice is required to be given to a supervisor (if possible) prior to the start of the persons assigned shift. If the emergency occurs during the course of their shift, the employee should notify this office (a supervisor if possible) prior to leaving.

- 5. Employees who are ill must give notice to this office (if possible a supervisor) prior to the start of their shift. Employees who become ill during the course of their shift need to notify this office (a supervisor if possible) prior to leaving.
- 6. Compensatory time may be earned in lieu of overtime and will be compensated at the rate of one hour worked equals one and one half hours of compensatory time earned. An employee may not accumulate more than 40 hours of compensatory time.
- 7. In the event that a large amount of personnel request the same day off, the Supervisor of Facilities Maintenance & Operations or designated representative may deny leave to insure, the Maintenance Department will have sufficient coverage for critical trades if needed.

REQUEST FOR LEAVE

	(schedule	uired for personal business, va ed doctor/dentist appointment CK DAY, PLEASE IDENTIFY HO THIS FORM.	s).	
NAME		DATE		
	DATE	TYPE OF LEAVE (VAC) (PB) (SICK)	HOURS	
SUBI	MIT COMPLETED FORM TO	Mike Andrews (labeled box located	on wall outside office door)	
APPROV	/AL	Mike Andrew	s f Facilities Maintenar	ıce

INCLEMENT WEATHER EMERGENCY STAFF PROCEDURES

Maintenance and custodial employees are designated as emergency staff. Emergency staff reports to work on time for their normal shift or on an altered emergency shift during extreme weather conditions.

Altered emergency shifts are determined at the discretion of the building principal or immediate supervisor. It is the dedication and hard work of the emergency staff which allow schools to safely open in the most expeditious fashion.

During an inclement weather day, an announcement regarding the delayed opening or closing of schools is generally made by 6:30 a.m. Procedures for emergency personnel are as follows:

Delayed opening of school: All maintenance and custodial staff will report for their scheduled shift unless otherwise directed. At the discretion of the principal or the immediate supervisor, custodian(s) from the evening shift may be designated to report to work on the day shift under these procedures. Reporting times are established by the principal or immediate supervisor.

<u>Closing of School</u>: All second and third shift maintenance and custodial staff are to report for their scheduled shift unless otherwise directed. Maintenance and custodial staff may be required to report to work on the day shift, under these procedures, depending on the needs of the individual work site. Reporting times will be established by the principal or the immediate supervisor.

Emergency staff may not use leave during periods of delayed openings or closing for inclement weather conditions. Employees who do not report to work during these periods will be docked a day's pay. If an employee is sick, they must provide verification from a physician. Pre-approved leave will be excluded from this directive.

Liberal leave procedures for Board of Education twelve month employees do not apply to the emergency staff. When there is a release from duty for twelve month employees due to emergency conditions, emergency staff will be allowed to take compensatory time at a later date or at a time mutually agreed upon between the employee and his/her supervisor.

ACCUMULATION OF COMPENSATORY TIME

Re:	Accumulation of Compensator	<u>y Time</u>	Date:	20
	Name:			
	Approval Signature:			
	Per our conversation, you are compensatory time on:	authorized	to work add	itional hours for
	Date:I	From:		To:
	REASON:			
	WORK ORDER NUMBER:			
	LOCATION:			

REQUEST TO USE COMPENSATORY TIME

24 hour written notice is required for compensatory leave

APPROVAL	Mike An	DATEdrews	_
		abeled box located on wall outsid	
		TO:	
DATE.	EDOM.	TO.	
NAME		DATE	

Uniforms

Contact: Supervisor of Facilities Maintenance Dept.

751-3199

Designated Carroll County Board of Education employees wear uniforms because of the nature of their job and public contact. This policy outlines procedures and guidelines for providing uniforms to facilities maintenance employees at Board of Education expense.

All full time Facilities Maintenance employees will be issued seven (7) sets of uniforms after satisfactory completion of a ninety-day probationary period. It will be mandatory that all Facilities Maintenance employees wear uniforms during work hours only. The wearing of blue jeans or other garments not issued by the school system violates this policy. Violation of this policy may be grounds for disciplinary action.

Standard Uniform

The standard Facilities Maintenance uniform shall consist of the following garments for men and women.

7 pair pants (industrial or jean style or combination)

7 each shirt/blouse/smock (L/S, S/S, or combination)

1 each jacket and liner (short waist or hip length)

2 pair coveralls - 1 insulated & 1 regular

7 each T-shirts (short sleeve)

7 pair shorts

1 baseball style cap

1 hooded sweatshirt

All facilities maintenance uniforms will be supplied with a Carroll County Public School logo patch. These patches must remain intact on the uniform.

Cleaning and Replacement

Once the complete sets of uniforms have been provided to the employee it will be the responsibility of the employee to clean his/her garments. Employees are expected to wear a clean uniform each day.

Uniforms will be replaced on an as needed basis only. The Supervisor of Facilities Maintenance Department will be responsible for making fiscally prudent uniform replacement decisions. Written recommendations shall be sent to the Facilities Maintenance Department for proper authorization form.

Carroll County Public Schools Maintenance Staff

Employee Name:	Date:
School Name:	Name to be Embroidered:

Description	Sizes	Catalog Number	Size	Quantity
Work Shirt: Men's, Short Sleeve, Light Blue	S-6X(REG) & M-5X(LN)	CPS9-1911-8		
Work Shirt: Men's, Long Sleeve, Light Blue	S-5X(REG), M-5X(LN) & L-3X(XLN)	CPS9-1901-8		
Work Shirt: Women's, Short Sleeve, Light Blue	S-4X	CPS9-1912-8		
Work Shirt: Women's, Long Sleeve, Light Blue	S-3X	CPS9-1902-8		
Smock: Women's, Short Sleeve, Light Blue	S-4X	CPS9-9601-8		
T-Shirt: Short Sleeve, Light Blue	S-2X	CPS5-7811-8		
Trousers: Men's, Jean Cut, Navy	28-50 & Inseam	CPS5-2801-3		
Trousers: Men's, Easy Fit, Navy	28-52 & Inseam	CPS5-2803-3		
Slacks: Women's, Half Elastic, Navy	4-32 & Inseam	CPS5-2802-3		
Slacks: Women's, Easy Fit, Navy	4-24 & Inseam	CPS5-2804-3		
Shorts: Men's, Side Elastic, Navy	29/30-45/46	CPS5-2811-3		
Shorts: Men's, Pleated Front, Navy	29/30-43/44	CPS5-2815-3		
Shorts: Women's, Pleated Front, Navy	4-22	CPS5-2817-3		
Jacket: Men's, Permanent Lining, Navy	S-5X(REG) & M-4X(LN)	CPS9-6755-3		
Jacket: Men's, Ike Style, Zip-in/Zip-out Lining, Navy	S-3X	CPS9-6701-3		
Liner: Men's, Quilted, For Ike Jacket, Black	S-3X	CPS9-7105-2		
Baseball Cap: Mesh Back, Navy	One Size	CPS5-3101-3		
Baseball Cap: Solid Back, Navy	One Size	CPS5-3503-3		
Coverall: Men's, Unlined, Action Back, Navy	34-62(REG) & 38-58(LN)	CPS9-3401-3		
Coverall: Men's, Insulated, Navy	S-4X(REG), M-2X(LN) & M-L(SH)	CPS9-3607-3		



289 East Green Street Westminster MD, 21157 410-876-6227 Fax: 410-876-7544 www.unitec-corp.com

FACILITIES MAINTENANCE & OPERATIONS DEPARTMENT



MAINTENANCE PROCEDURES MANUAL

PREVENTIVE MAINTENANCE PROGRAM

SECTION VI

PREVENTIVE FACILITIES MAINTENANCE PROGRAM

Preventive Maintenance (P.M.) generally refers to routine inspections, adjustments, lubrication and cleaning of fixed and movable equipment, machinery and appliances utilized in the daily operation of a facility. Performing regular routine preventive maintenance keeps equipment in good running order, reducing the possibility of equipment failure thus insuring and extending expected equipment life. Through regular preventive maintenance, potential problems can be detected early thus reducing down time and preventing more expensive repairs.

The performance of routine preventive maintenance in each school facility is the responsibility of the building supervisor. The following document is designed to give building supervisors the guidance necessary to perform basic routine P.M. checks and tasks. These checks are to be performed throughout the school building, both interior and exterior, including the grounds. The P.M. duties incorporated in this package are an expected function of the building supervisor's normal duties.

The enclosed P.M. program provides an outline and checklist of the items to be inspected and performed by the building supervisor. The frequency that the items are to be checked, and the procedures required for each item are also detailed in the program. The first two pages are an outline of the P.M. items at scheduled intervals throughout the year. The check sheets are a combination of all the items scheduled for P.M. during that particular time interval. Check sheets are provided for daily, weekly, monthly, quarterly and annual preventive maintenance tasks.

It is the responsibility of the building supervisor to see that these P.M. tasks are performed and properly recorded on the appropriate check sheet. As with other assignments, the building supervisor may desire to delegate some of the tasks to subordinate employees. The original check sheet shall be posted at a visible location in the Building Supervisor's office. Completed reports shall be forwarded to the Supervisor of Facilities Maintenance & Operations by the $10^{\rm th}$ of each month. The reports expected at that time include the daily, weekly and monthly check sheets. The quarterly and annual check sheets are to be forwarded by the $10^{\rm th}$ of the month following the conclusion of the performance period.

Problems found during the P.M. inspections should be noted in the inspector's comments section on each check sheet. Problems that cannot be repaired by the building supervisor or his/her designee should be reported to the Supervisor of Facilities Maintenance & Operations, either by an electronic Maintenance Requisition or by telephone if considered an emergency.

Check sheets require either a visual inspection, a specific task to be performed or the recordation of information. The majority of the routine inspections are primarily visual inspections that should be incorporated into the building supervisor's daily travels throughout the school facility.

BUILDING SUPERVISORS PREVENTATIVE MAINTENANCE

EQUIPMENT	INTERVAL	MAINTENANCE CHECKS AND DUTIES	COMMENTS
EQUIPMENT	INIERVAL	MAINTENANCE CHECKS AND DOTTES	COMMENTS
AIR	Daily	Check for proper operation	Tank pressure\all compressors run
COMPRESSORS:	Daily	Drain moisture from separators	Drain till moisture disappears
	Daily	Drain moisture from Tank	Drain till moisture disappears
	Monthly	Check oil level	Adjust level as needed
	Quarterly	Check V-belt tension	Adjust level as needed
	Quarterly	Clean filter intake	Adjust belt with 2" flex
			Wash or blow out as required
AIR	Daily	Check operation	Cooling properly
CONDITIONING:	Weekly	Check cooling towers	Fan running\water level proper
	Monthly	Check air cooled condensers	All fans run\coils clean
	Quarterly	Check - adjust V-belts	Adjust belts with 2" flex
	Annually	Clean A/C coils	Vacuum\wash finned coils
AIR HANDLERS:	Quarterly	Lubricate bearings	Use 4 to 6 pumps of grease
	Quarterly	Check air filters	Change as needed
	Quarterly	Check roll filters	Change as needed
	Quarterly	Lubricate motors	Oil & lube sparingly
	Quarterly	Check V-belts	Adjust belt with 2" flex
BLEACHERS:	Weekly	Check operation & alignment	Repair or report all problems
	Monthly	Inspect units for damage & loose parts	Repair or report all problems

	Annually	Clean and lubricate undercarriage assembly	Grease slides-lube rollers
BOILERS: Hot water Steam Boiler	Daily Daily Daily	Check water temp & water pressure Check water level, blow sight glass, water feeder, and mud legs Check for oil leaks	Temp 120°-200°\Pres 12 - 25 lbs. Check for proper level Blow out till water is clear Repair or report promptly
	Weekly	Boiler air pumps - check oil reservoir	Fill with special oil only
BUILDINGS:	Daily Daily Weekly	Check all windows & doors Check all fire & safety devices Check interior & exterior of building	Repair or report all damage Repair or report all problems Repair or report all problems
CIRCULATING PUMPS:	Daily Weekly Quarterly Quarterly	Check operation Lead - lag sequence\rotate pumps Check couplings Lubrication	Running & pump discharge press. Manually switch pumps Not loose or slipping Oil & lube sparingly
ELECTRIC MOTORS:	Weekly Quarterly Quarterly	Check operation Lubricate Clean air over vents	They run, not noisy or overheating Oil & lube sparingly Clear all dirt from motor
EMERGENCY LIGHTS:	Weekly Weekly	Check emergency light operation Check battery water level	Repair or report all problems Add distilled water if needed
HOT WATER HEATERS:	Daily Monthly	Check water temperature Drain bottom of tank	Use gauge or thermometer Blow out till water is clear
EQUIPMENT	INTERVAL	MAINTENANCE CHECKS AND DUTIES	COMMENTS
LIGHTING:	Daily Weekly Weekly	Check all interior lights Check all exterior lights Check time clocks	Replace bulbs - ballasts as needed Replace bulbs - ballasts as needed Set correct time\check pins

PLUMBING:	Daily Daily	Check all lavatory flush valves Check equipment operation	Work properly\not dripping
REFRIGERATION EQUIPMENT:	Daily Daily	Check temp. on all refrigerated equipment Check equipment operation	(Record) Cooler temp. 40° - 45°F. (Record) Freezer temp. 0°5°F. Runs O.K.\not short cycling
WATER COOLERS:	Weekly Annually	Check for cooling operation Clean condenser coils	Water temperature 40° - 45° F. Vacuum finned air coils

FACILITIES MAINTENANCE & OPERATIONS DEPARTMENT



MAINTENANCE PROCEDURES MANUAL

BOILER AND PRESSURE VESSEL LOGBOOK

SECTION VII

BOILER AND PRESSURE VESSEL



LOG BOOK

FACILITIES MAINTENANCE DEPT. 48 Monroe Street Westminster, MD 21157

(410) 751-3199

PREFACE

Boiler and Pressure Vessel Log Book For Carroll County Public Schools

The purpose of this logbook is to provide a history of when each boiler and pressure vessel in each facility was last inspected and what the condition of each device was at the time of each inspection. This record will provide the Facilities Maintenance Department as well as the Boiler inspector with the history of each piece of equipment at a glance. This will also serve as an evaluation tool in determining that all violations or corrective action has been addressed after the boiler inspector's official notification to the Facilities Maintenance Department.

It will be the Building Supervisors responsibility to assure that the boiler inspector fills in the logbook each time an inspection is performed.

INSPECTORS NAME/CO.	INSPECTION DATE	EQUIPMENT NUMBER	EQUI PMENT NAME	PRESENT CONDITION	COMMENTS

CARROLL COUNTY PUBLIC SCHOOLS FACILITIES MAINTENANCE DEPARTMENT

48 Monroe Street Westminster, Maryland 21157

Mike Andrews Supervisor TELEPHONE: (410) 751-3199

FAX: (410) 751-3228

BOILER AND PRESSURE VESSEL INVENTORY LOG

SCHOOL LOCATION	DATE REC	ORDED	
EQUIPMENT TYPE (ie; Boiler, C	hiller, Hot Water H	eater, Air compressor & S	teamer)
UNIT DESCRIPTION (TYPE)			
If Modular (No. Of Modules)			
UNIT CAPACITY (Output in BT			
Primary VoltageSecond	-		
UNIT IDENTIFICATION			Voor Duilt
Manufacturer=s Model# ASME #		Nat Bd #	_Year Built
UL#		AGA #	
State I.D. #			
<u>BURNER</u>			
Manufacturer		Model	
UL or AGA #		Serial#	
FUEL TYPE			
UNIT MANUFACTURER			
Name			
Address Telephone		Zip	
Telephone	FAX		
<u>STEAM</u>		HOT WATER	
Max W.P	psig	Max W.P	psig
Min Safety Valve Cap	PPH	Max temp	deg. F
	Min Safe	ety Relief Valve Cap.	PPH or Btu

BOILER AND PRESSURE VESSEL INVENTORY LOG

(Continued)

CONTROL/DEVICE	MAN	UFACTURER	e MOI	DEL #	TEST PER DATE	FORMED	
OPERATING CONTRO	LS						
Low-Water Fuel Cutoff					-		
Steam Pressure							
Water Temperature							
High/Low Fire							
Summer/Winter Control							
Pressure Switch							
SAFETY CONTROLS							
Low-Water Fuel Cutoff							
High Steam Pressure Lim	nit	_			_	_	
High Water Temperature	Limit	-			_		
Fuel Safety Shutoff Valve					_		
Pilot Safety Shutoff Valve	e						
Combustion Air Proof Sw	itch	-			_	_	
High Gas Pressure							
Low Gas Pressure							
Flame Safeguard (primar Oil Failure	y) 	-				<u> </u>	
SAFETY RELIEF VALV		_	Manufact	urer	F VALVE		
Model		<u> </u>	Model				
Size		_I nches	Size			Inches	
Capacity		_PPH or Btu/h	ır Capaci	ity			PPF
or Btu/hr							
Relieving Pressure		_Psi	Relieving	Pressur	re	Psi	
FUEL TANK							
Type		_					
Size		_					

FACILITIES MAINTENANCE DEPARTMENT PROCEDURES MANUAL



MAINTENANCE PROCEDURES MANUAL

VEHICLE – FLEET MANAGEMENT
SECTION VIII

VEHICLE MAINTENANCE

The motor vehicle maintenance shop is located in the same structure as the Facilities Maintenance Department. All vehicles assigned to Facilities Operations, Facilities Maintenance, Food Services, Purchasing and Facilities are maintained by two full-time automotive mechanics.

The primary maintenance tasks performed by the automotive technicians are state vehicle inspections, oil changes and lubrication, brake service, engine tune-ups, minor driveline repairs, and minor body repairs. All major overhauls and extensive repair work are performed by outside contractors.

The Lead Automotive Mechanic maintains detailed records on all Board of Education owned motor vehicles documenting total mileage, dates of service, emissions testing and major repairs performed. This information will be used for future vehicle evaluations and to determine the need for replacement vehicles based on age, condition and total mileage.

Projections for replacement of motor vehicles are coordinated through the Supervisor of Facilities of Maintenance & Operations and the Lead Automotive Mechanic.

The vehicle's assigned operator performs the washing and cleaning of each vehicle.

<u>Vehicle – Fleet Management Procedures</u>

Contact: Supervisor of Facilities Maintenance & Operations 751-3199

INVENTORY:

Maintenance of the Fleet Inventory records shall be split between the Supervisor of Facilities Maintenance & Operations and the Supervisor of Transportation.

The Supervisor of Facilities Maintenance & Operations shall be responsible for maintaining fleet records for all vehicles except those assigned to the Pupil Transportation Department, Pupil Services and Physical Education. These include all Facilities Maintenance vehicles as well as passenger cars assigned to the Director of Facilities, Maintenance & Operations, the Facilities Operations staff, the School Construction staff, the Facilities Planner and Technology Services.

The Supervisor of Transportation shall be responsible for maintaining fleet records for all Board of Education owned buses and all vehicles assigned to the Pupil Transportation Department These include buses, staff cars, and pool cars.

Vehicles should appear on the inventory of the designated cost center.

PROCUREMENT SPECIFICATIONS:

Individual cost centers are responsible for budgeting for additional and replacement vehicles. Specifications shall be prepared by the Supervisor of Transportation for all school buses and by the Supervisor of Facilities Maintenance & Operations for all other vehicles in cooperation with the Supervisor of Purchasing. Specifications for all types of vehicles except buses will be maintained by the Supervisor of Facilities Maintenance & Operations and updated as necessary. All vehicle bids must be reviewed by either the Supervisor of Transportation (for buses) or the Supervisor of Facilities of Maintenance & Operations (for all other vehicles) prior to release of bid.

PURCHASE AND DELIVERY:

The Supervisor of Purchasing and either the Supervisor of Transportation or the Supervisor of Facilities Maintenance & Operations will determine recommendation of bid award collectively. Once a bid is awarded, the Supervisor of Purchasing shall confirm with the cost center administrator that funds are available and generate the purchase requisition. The Supervisor of Purchasing shall be the designated point of contact for the vendor.

Upon notification by the vendor that the vehicle is ready for delivery, the Supervisor of Transportation (for buses) or the Supervisor of Facilities of Maintenance & Operations (for all other vehicles) will be notified. Pick up and

inspection of the vehicle will be accomplished by the assigned supervisors.

After the vehicle is inspected to assure that all bid specifications are satisfied, the vehicle will be released for assignment to the designated cost center.

TAG AND TITLE:

Tag and title work will be accomplished by the Supervisor of Transportation (for buses) and the Supervisor of Facilities Maintenance & Operations (for all other vehicles). The Director of Administrative Services shall keep all titles on file.

DISPOSAL:

Vehicles shall be disposed of by trade in to the vendor in accordance with the bid or sold at public auction. The determination as to the disposal method most advantageous to the Board of Education shall be made by the Supervisor of Purchasing in cooperation with the Supervisor of Transportation (for buses) and the Supervisor of Facilities Maintenance & Operations (for all other vehicles).

REPLACEMENT:

Cost center administration should budget for replacement vehicles when one or more of the following applies:

- A. Passenger Vehicles
 - The vehicle is eight (8) years old
 - The vehicle has 80,000 miles or will have in the upcoming budget year.

OR

- B. Trucks and other vehicles--
 - The vehicle is ten years old.
 - The vehicle has 100,000 miles or will have in the upcoming budget year.

AND

- C. The maintenance expenditure experience exceeds \$3,000 annually or
 - \$.09/mile sedans
 - \$.13/mile full size vehicles
 - \$.15/mile light trucks
 - \$.45/mile dump trucks

This experience includes repair parts, labor and oil.

• School buses must be replaced in accordance with the provisions of the Code of Maryland Regulations.

FACILITIES MAINTENANCE & OPERATIONS DEPARTMENT



MAINTENANCE PROCEDURES MANUAL

TRAINING PROCEDURES

SECTION IX

EMPLOYEE TRAINING PROCEDURES

TRAINING PROGRAMS:

All new employees will be given an overview of expectations and procedures by Administration. They will then be placed with experienced technicians who will initially train the employee in the proper methods of job performance as required by the Facilities Maintenance Department. After consultation with the training technicians and a review of work accomplishments, it will then be decided by Administration if the new employee will be assigned tasks with minimal or no supervision as may be required by their job classification.

Department meetings shall be held on a routine basis in order to update employees of any policy or procedural changes. Suggestions from personnel to enhance operations are encouraged at any time.

In order to diversify worker skills, all Facilities Maintenance employees will be offered training on any currently stocked or newly acquired tool or equipment. Training will be mandatory for those personnel who in the course of their job would be required to use the aforementioned. Efforts will be made to have a representative from the supplying company give initial training and any follow up that may be necessary.

Advanced OEM training shall be offered as needed in order to stay abreast of industry standards.

The Training Supervisor shall maintain a record of all training classes i.e., subject, attendees, date and instructor.

When possible specific Facilities Maintenance personnel will accompany outside contractors on site in order to evaluate and gain knowledge of installations or repairs made on CCPS property.

Facilities Maintenance teams that are pertinent to a new construction walk thru shall meet with the Facilities Maintenance Supervisors as soon as possible. These forums will be used to share knowledge of the new equipment or sequence of operation and to voice any concerns that may need to be transmitted to the Construction Department.

All Facilities Maintenance employees shall attend annual in-service training offered by CCPS.

Possible employee advancement or job description could require obtaining a government license or certification. The Department will make efforts, if requested, to insure that the employee is prepared for any such occasion.

The Facilities Maintenance Department shall maintain contacts with private and government entities to insure that information concerning any code or major operational changes are referred to the proper trade.

TRAINING PROCEDURES:

During the interview process, it is ascertained that the individual is knowledgeable and skilled in the industry standards for the applied position.

INITIAL TRAINING

- Work Hours
- Breaks and Lunch
- Responsibilities of Specific Trade
- Reporting Procedures
- Time Card
- Uniforms
- Safety
- Call outs/overtime
- Snow Removal

FIELD ORIENTATION

- Ride Along w/Experienced Technician
- Location of Schools and Relative Equipment
- Safety
- Completion of Work Orders

MANDATORY INSERVICE TRAINING

(Provided by Carroll County Public Schools)

Safety Training:

- Use of Aerial Platform
- Blood Borne Pathogens
- Hazardous Chemicals Proper Use of and Disposal
- Lockout/Tagout Procedures
- Proper Use of Protective Devices, i.e., earplugs, mask, etc.

Human Resources:

- Sexual Harassment
- Child Abuse
- Alcohol and Drug Abuse
- Benefits

CONTINEUOUS TRAINING

Continuous training is provided relative to employee's specific job. All employees are encouraged to participate in order to enhance their skills in other trades for the purpose of expanding their job knowledge.

Existing and New Equipment:

- Operation
- Maintenance
- Safety

Monthly Meetings held by Facilities Maintenance Supervisor:

- Training Supervisor will update employees on scheduled and upcoming training
- Training Supervisor will maintain a record of all training classes given by the Facilities Maintenance Department. These logs will contain the type of training, personnel involved and dates.

Preventive Maintenance:

- Provide procedures and timelines to Building Supervisors
- Facilities Maintenance Technician will perform tasks that are above and beyond the scope of the Building Supervisor
- Facilities Maintenance Technician will ensure that the Building Supervisor has a basic knowledge for equipment operation

O.E.M. Training (Original Equipment Manufacturer):

- Will be offered in order to keep employees up to industry standards given by the manufacturer either off site or in-house
- Sequence of operation
- Troubleshooting
- Maintenance
- Safety

Training Measurement:

Ongoing employee feedback:

- Solicit input after training
- Coaching and follow-up performed as needed
- Safety stressed

Maintenance Supervisor Audits:

- Quality of work
- Timelines for the work
- Safety habits
- Equipment care and usage
- Recommend remedial training if necessary

Quarterly Newsletter:

Published to update Carroll County Public Schools personnel on:

- Facilities Maintenance Department accomplishments
- Act as a reminder for procedural changes, i.e., parts requisitions, work order submissions, etc.